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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/640,710	08/18/2000	Blair Lewis Stringam	REC-6201	6471
7590 04/27/2004			EXAMINER	
Neil L Mark Esq U S Department of Interior 1849 C Street NW Washington, DC 20240			PATEL, HARSHAD R	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 04/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/640,710	STRINGAM ET AL.	
	Examiner	Art Unit	
	Harshad Patel	2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 is/are allowed.
- 6) ☒ Claim(s) 13-16 is/are rejected.
- 7) ☒ Claim(s) 17 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eckert et al. (5,737,963) in view of Schontzler et al. (3,866,028) (hereinafter Eckert or Schontzler).

Eckert teaches all the features of the instant invention including an ultrasonic transducer including a single housing comprising a top portion and a bottom portion (2) and a downwardly depending member (1) connected to the bottom portion of the housing and wherein the sensor (4) is received in the downwardly depending member. The housing (1) includes an electronic (central processing unit) for receiving and processing the signal from the sensor. Eckert is not specific of the display device but indicates that the signals related to the measurements are made available for further processing and/or indication (col. 4, lines 14-15). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a display device on the housing so that it would be convenient to the user to view any values displayed without opening the housing. Furthermore, liquid crystal devices are notoriously well known for displaying the data. As to the use of a recorder used for the measurement structure of a weir or flume, Schontzler teaches such a structure. Schontzler also teaches the processing unit determining the average pressure head in the flow channel over predetermined time. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use any environmental structure for performing the measurement since it is unto an individual's preference as to where to mount the device for measurement.

Allowable Subject Matter

3. Claims 17 and 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
4. Claim 19 is allowed.

Response to Arguments

5. Applicant's arguments with respect to claims 13-19 have been considered but are moot in view of the new ground(s) of rejection.

The arguments are basically related to the housing structure as referred below.

"A key feature of the present invention concerns the provision of a single housing for housing the sensor, central processing unit and display device and, in particular, the provision, of a housing of an especially advantageous construction. In this regard, the housing, as recited in claim 13, comprises a top portion, a bottom portion mechanically connected to the top portion, and a downwardly depending member connected to the bottom portion of the housing, with the sensor being received in the downwardly depending member. This results in a highly compact, effective arrangement wherein the sensor is protected and the interior of the housing is easy to access when necessary". Thus it is noticed that the critical feature of the invention is nothing more than a housing attachment. Eckert teaches such a structure. The examiner has cited few more references that relate to such a structure.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lynn et al. (3719081) teaches a transducer housing with a downwardly depending member. Schmidt (6414242) teaches a housing structure for housing the electronics and a downwardly depending member for receiving a sensor.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harshad Patel whose telephone number is (571) 272-2187. The examiner can normally be reached on Monday-Thursday (7:00 AM-5:30 PM).



Harshad Patel
Primary Examiner
Art Unit 2855

hp
April 22, 2004